

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-26. (Previously Cancelled)

27. (Currently Amended) A ~~Management Entity having a Provisioning Node side intended for provisioning a service towards a Network Element~~ management entity having a provisioning node side for provisioning a service towards a network element by sending provisioning orders, the ~~Management Entity~~ management entity supporting a Subscription Management Generic Interface (SuM-GI) that includes a SuM-GI Data Model, the management entity ~~Management Entity~~ comprising:

a number of protocol adapters, each protocol adapter for communication with a specific protocol technology, at least one ~~Protocol Adapter~~ protocol adapter for communicating with a specific protocol technology used at the ~~Network~~ network element; and

a SuM-GI Manager manager for sending provisioning orders to create and manage subscriptions to services in the ~~Network Element~~ network element through the one protocol adapter with a number of SuM-GI Operations operating on Objects Classes included in the SuM-GI Data Model, and independently from an internal data model used by the ~~Network Element~~ network element; and

means for communicating over a communication network with a mapping module in the Network Element for mapping a provisioning order received from the SuM-GI Manager into a number of internal operations operating on an internal data model supported by the Network Element and for the Network Element to register itself at the SuM-GI Manager and for establishing the specific protocol technology used at the Network Element.

and wherein the SuM-GI Data Model comprises at least one Object Class selected from ~~a group of Object Classes:~~

SubscriptionIRP object class, for indicating to ~~[[a]] the SuM-GI manager Manager~~ the a SuM-GI version supported by each particular SuM-GI agent Agent in a managed entity Managed-Entity, and thus arranged for comprising a list of the SuM-GI versions supported by known SuM-GI ~~agentsAgents~~;

SubscriptionFunction object class, for sub-classing Subscription, Subscriber, User, and UserServicePreferences related object classes and arranged for providing attributes that are common to underlying managed Managed-Object Classes; and

ServiceProviderFunction object class, for sub-classing ProvidedService related object classes and arranged for providing attributes that are common to underlying managed Managed-Object Classes.

28. **(Currently Amended)** The management entity Management-Entity of claim 27, wherein the SuM-GI Data Model further comprises at least one managed Managed Object Class selected from:

Subscription object class, for modeling the agreement or contract established between a subscriber and a service provider and arranged for containing all the information related with the subscription;

Subscriber object class, for identifying a subscriber holding a subscription with a service provider for a given service and arranged for registering a number of users allowed to use said given service;

ProvidedService object class, for modeling a service provider inventory of offered services and arranged for maintaining applicable capabilities of said offered services;

User object class, for identifying a user associated to a given subscriber and arranged for customizing particular user preferences for a given service; and

UserServicePreferences object class, for allowing a number of users associated with a subscriber to have particular service preferences and arranged for containing different service capabilities enabled for each user.

29. **(Currently Amended)** A network element ~~Network-Element~~ where a service is provisioned to subscribers of a communication network, the network element ~~Network-Element~~ supporting a Subscription Management Generic Interface (SuM-GI) that includes a SuM-GI Data Model, the network element ~~Network-Element~~ comprising:

at least one protocol adapter ~~Protocol-Adapter~~ for communicating over a communications network with a particular protocol technology used by a management entity ~~Management-Entity~~ to send provisioning orders;

a SuM-GI agent ~~Agent~~ for receiving provisioning orders with a number of SuM-GI Operations operating on Objects Classes included in the SuM-GI Data Model; and

a Mapping Module for mapping received instances of the SuM-GI Data Model into an internal data model, registering itself at the Management Entity and establishing the particular protocol technology;

and wherein the SuM-GI Data Model comprises at least one Object Class selected from ~~a group of Object Classes:~~

SubscriptionIRP object class, for indicating to a SuM-GI manager ~~Manager~~ the SuM-GI version supported by each particular SuM-GI agent ~~Agent~~ in a managed entity ~~Managed Entity~~, and thus arranged for comprising a list of the SuM-GI versions supported by known SuM-GI agents ~~Agents~~;

SubscriptionFunction object class, for sub-classing Subscription, Subscriber, User, and UserServicePreferences related object classes and arranged for providing attributes that are common to underlying managed ~~Managed~~ Object Classes; and

ServiceProviderFunction object class, for sub-classing ProvidedService related object classes and arranged for providing attributes that are common to underlying managed ~~Managed~~ Object Classes.

30. **(Currently Amended)** The network element ~~Network Element~~ of claim 29 wherein the SuM-GI Data Model further comprises at least one managed ~~Managed~~ Object Class selected from ~~a group of Object Classes:~~

Subscription object class, for modeling the agreement or contract established between a subscriber and a service provider and arranged for containing all the information related with the subscription;

Subscriber object class, for identifying a subscriber holding a subscription with a service provider for a given service and arranged for registering a number of users allowed to use said given service;

ProvidedService object class, for modeling a service provider inventory of offered services and arranged for maintaining applicable capabilities of said offered services;

User object class, for identifying a user associated to a given subscriber and arranged for customizing particular user preferences for a given service; and

UserServicePreferences object class, for allowing a number of users associated with a subscriber to have particular service preferences and arranged for containing different service capabilities enabled for each user.

31. **(Currently Amended)** A method for provisioning services to subscribers of a communication network, the method applying between a management entity ~~Management-Entity~~ that has a provisioning node ~~Provisioning-Node~~ side intended for provisioning a service, and a number of managed entities ~~Managed-Entities~~ each one having a provisioned node ~~Provisioned-Node~~ side intended for receiving provisioning orders from the management entity ~~Management-Entity~~, the method comprising the steps of:

registering each Managed Entity of the number of Managed Entities with the Management Entity and establishing a specific protocol to acknowledging of each Managed Entity with the Management Entity;

assigning a specific protocol technology for communication between a Subscription Management Generic Interface (SuM-GI) manager ~~Manager~~ at a provisioning node ~~Provisioning-Node~~ side and each SuM-GI agent ~~Agent~~ at respective provisioned node ~~Provisioned-Node~~ sides;

sending provisioning orders from the SuM-GI manager ~~Manager~~ towards at least one SuM-GI agent ~~Agent~~ with a number of SuM-GI Operations intended for operating on Object Classes included in a SuM-GI Data Model;

receiving the provisioning orders at a SuM-GI agent ~~Agent~~ in the provisioned node ~~Provisioned-Node~~ side of at least one managed ~~Managed~~ entity with a number of SuM-GI Operations operating on Object Classes included in the SuM-GI Data Model; and

mapping in ~~this~~ said provisioned node ~~Provisioned-Node~~ side the provisioning order received from the SuM-GI manager ~~Manager~~ with the SuM-GI Operations operating on Object Classes of the SuM-GI Data Model into a number of internal operations operating on an internal data model supported by the managed entity ~~Managed-Entity~~;

and wherein the SuM-GI Data Model comprises at least one Object Class selected from a ~~group of Object Classes that includes:~~

SubscriptionIRP object class, for indicating to a SuM-GI manager ~~Manager~~ the SuM-GI version supported by each particular SuM-GI agent ~~Agent~~ in a managed entity ~~Managed-Entity~~, and thus arranged for comprising a list of the SuM-GI versions supported by known SuM-GI agents ~~Agents~~;

SubscriptionFunction object class, for sub-classing Subscription, Subscriber, User, and UserServicePreferences related object classes and arranged for providing attributes that are common to underlying managed ~~Managed~~ Object Classes; and

ServiceProviderFunction object class, for sub-classing Provided Service related object classes and arranged for providing attributes that are common to underlying managed ~~Managed~~-Object Classes.

32. (Currently Amended) The method of claim 31, wherein upon receipt of a provisioning order from a Subscription Management Generic Interface (SuM-GI) manager ~~Manager~~ in a SuM-GI agent ~~Agent~~ at a sub-network manager ~~Sub-Network Manager~~, the method further comprising the steps of:

transferring the provisioning order received from a first SuM-GI manager ~~Manager~~ at a provisioning node ~~Provisioning-Node~~ side of a management entity ~~Management-Entity~~ or higher hierarchical managed entity ~~Managed-Entity~~ towards a second SuM-GI manager ~~Manager~~ at a provisioning node ~~Provisioning-Node~~ side of the current node;

assigning a specific protocol technology for communication between the second SuM-GI manager ~~Manager~~ at the provisioning node ~~Provisioning-Node~~ side of the current node and each SuM-GI agent ~~Agent~~ at respective provisioned node ~~Provisioned Node~~ sides of lower hierarchical managed entities ~~Managed-Entities~~; and

sending provisioning orders from the second SuM-GI manager ~~Manager~~ towards at least one SuM-GI agent ~~Agent~~ at a provisioned node ~~Provisioned Node~~ side of a lower hierarchical managed entity ~~Managed-Entity~~ with a number of SuM-GI Operations for operating on Object Classes included in a SuM-GI Data Model.

33. (Previously Cancelled)

34. (Previously Cancelled)

35. (Currently Amended) The method of claim 31, wherein the Subscription Management Generic Interface (SuM-GI) includes a SuM-GI Data Model further comprising at least one managed Managed Object Class selected from a group of Object Classes including:

Subscription object class, for modeling the agreement or contract established between a subscriber and a service provider and arranged for containing all the information related with the subscription;

Subscriber object class, for identifying a subscriber holding a subscription with a service provider for a given service and arranged for registering a number of users allowed to use said given service;

ProvidedService object class, for modeling a service provider inventory of offered services and arranged for maintaining applicable capabilities of said offered services;

User object class, for identifying a user associated to a given subscriber and arranged for customizing particular user preferences for a given service; and

UserServicePreferences object class, for allowing a number of users associated with a subscriber to have particular service preferences and arranged for containing different service capabilities enabled for each user.

36. (Currently Amended) The method of claim 31, wherein the Subscription Management Generic Interface (SuM-GI) includes a SuM-GI Operation set

for acting on a SuM-GI Data Model and comprising any ~~Operations, or combinations thereof, selected~~ Operations selected from ~~group of operations:~~

creating, modifying, removing and getting Subscriber;
creating, modifying, removing and getting User;
creating, modifying, removing and getting Provided Service.
creating, modifying, removing and getting Subscription;
adding, removing and getting User to or from a given Subscription; and
setting and getting User Service Preferences for a user under a given Subscription;

37. (Previously Cancelled)

38. (Previously Presented) The method of claim 31, wherein the Subscription Management Generic Interface (SuM-GI) is arranged for holding specific attributes or characteristics of those objects included in the SuM-GI Object Model in a generic information placeholder associated to each particular object.

39. (Currently Amended) The method of claim 38, wherein the Subscription Management Generic Interface (SuM-GI) is arranged for allowing each individual SuM-GI agent ~~Agent~~ to determine whether or not each particular attribute in a list of attributes is applicable in the node where the SuM-GI agent ~~Agent~~ resides, the applicability depending on a specific internal data model in said node.

40. **(Currently Amended)** In a communication network, a Subscription Management Generic Interface (SuM-GI) comprising:

a SuM-GI Data Model and SuM-GI Operations for provisioning services to subscribers of the communication network wherein said Subscription Management Generic Interface (SuM-GI) operates in accordance with an Integration Reference Point (IRP) specification within an IRP Generic Network Resource Model, wherein the SuM-GI Data Model comprises at least one Object Class selected from ~~a group of object classes~~:

SubscriptionIRP object class, for indicating to a SuM-GI manager ~~Manager~~ the SuM-GI version supported by each particular SuM-GI agent ~~Agent~~ in a managed entity ~~Managed Entity~~, and thus arranged for comprising a list of the SuM-GI versions supported by known SuM-GI agents ~~Agents~~;

SubscriptionFunction object class, for sub-classing Subscription, Subscriber, User, and UserServicePreferences related object classes and arranged for providing attributes that are common to underlying managed ~~Managed~~ Object Classes; and

ServiceProviderFunction object class, for sub-classing ProvidedService related object classes and arranged for providing attributes that are common to underlying managed ~~Managed~~ Object Classes.

41. **(Currently Amended)** The management entity ~~Management Entity~~ of claim 27, wherein the Subscription Management Generic Interface (SuM-GI) includes a SuM-GI Operation set for acting on the SuM-GI Data Model and comprising ~~any~~ Operations, ~~or combinations thereof~~, selected from ~~groups of operations~~:

creating, modifying, removing and getting Subscriber;
creating, modifying, removing and getting User;
creating, modifying, removing and getting Provided Service.
creating, modifying, removing and getting Subscription;
adding, removing and getting User to or from a given Subscription; and
setting and getting User Service Preferences for a user under a given Subscription.

42. **(Currently Amended)** The management entity ~~Management Entity~~ of claim 27, wherein both SubscriptionFunction and ServiceProviderFunction object classes inherit from a managed Managed Object Class (ManagedElement) representing telecommunication equipment or network element related functions.

43. **(Currently Amended)** The network element ~~Network Element~~ of claim 29, wherein the Subscription Management Generic Interface (SuM-GI) includes a SuM-GI Operation set for acting on the SuM-GI Data Model and comprising Operations selected from ~~groups of operations~~:

creating, modifying, removing and getting Subscriber;
creating, modifying, removing and getting User;
creating, modifying, removing and getting Provided Service.
creating, modifying, removing and getting Subscription;
adding, removing and getting User to or from a given Subscription; and

setting and getting User Service Preferences for a user under a given Subscription.

44. **(Currently Amended)** The network element ~~Network-Element~~ of claim 29, wherein both SubscriptionFunction and ServiceProviderFunction object classes inherit from a managed ~~Managed~~-Object Class (ManagedElement) representing telecommunication equipment or network element related functions.

45. **(Currently Amended)** The method of claim 31, wherein at least one managed entity ~~Managed-Entity~~ is a network element ~~Network-Element~~ in which a given service is provisioned, and wherein a number of managed entities ~~Managed-Entities~~ may optionally form a hierarchical sub-network manager ~~Sub-Network-Manager~~ structure interposed between a centralized management entity ~~Management-Entity~~ acting as a network manager ~~Network-Manager~~, and a number of network elements ~~Network-Elements~~, each sub-network manager ~~Sub-Network-Manager~~ comprising:

a SuM-GI manager ~~Manager~~, a SuM-GI agent ~~Agent~~ and a number of protocol adapters ~~Protocol-Adapters~~, thus presenting a provisioned node ~~Provisioned-Node~~ side towards a provisioning node ~~Provisioning-Node~~ side at a network manager ~~Network-Manager~~ or at another sub-network manager ~~Sub-Network-Manager~~, and a provisioning node side ~~Provisioning-Node-Side~~ towards a provisioned node ~~Provisioned-Node~~ side at a network element ~~Network-Element~~ or at another sub-network manager ~~Sub-Network-Manager~~.

46. **(Currently Amended)** The use of claim 40, wherein both SubscriptionFunction and ServiceProviderFunction object classes inherit from a managed ~~Managed~~ Object Class "ManagedElement" representing telecommunication equipment or network element related functions.